



## General

### Guideline Title

Screening for suicide risk in adolescents, adults, and older adults in primary care: U.S. Preventive Services Task Force recommendation statement.

### Bibliographic Source(s)

U.S. Preventive Services Task Force. Screening for suicide risk in adolescents, adults, and older adults in primary care: U.S. Preventive Services Task Force recommendation statement. *Ann Intern Med.* 2014 May 20;160(10):719-26. [35 references] [PubMed](#)

### Guideline Status

This is the current release of the guideline.

This guideline updates a previous version: U.S. Preventive Services Task Force. Screening for suicide risk: recommendation and rationale. *Ann Intern Med* 2004;140:820-1. [4 references].

## Recommendations

### Major Recommendations

The U.S. Preventive Services Task Force (USPSTF) grades its recommendations (A, B, C, D, or I) and identifies the levels of certainty regarding net benefit (High, Moderate, and Low). The definitions of these grades can be found at the end of the "Major Recommendations" field.

#### Summary of Recommendation and Evidence

The USPSTF concludes that the current evidence is insufficient to assess the balance of benefits and harms of screening for suicide risk in adolescents, adults, and older adults in primary care. (I statement)

#### Clinical Considerations

##### Patient Population Under Consideration

This recommendation applies to adolescents, adults, and older adults in the general U.S. population who do not have an identified psychiatric disorder.

##### Suggestions for Practice Regarding the I Statement

##### *Potential Preventable Burden*

In 2010, suicide accounted for more than 1.4 million years of potential life lost before age 85 years, or 4.3% of total years of potential life lost in

the United States. Past studies estimated that 38% of adults (50% to 70% of older adults) visited their primary care provider within 1 month of dying by suicide. Nearly 90% of suicidal youths were seen in primary care during the previous 12 months.

Given that most persons who die by suicide have a psychiatric disorder and many have been seen recently in primary care, primary care clinicians should be aware of psychiatric problems in their patients and should consider asking these patients about suicidal ideation and referring them for psychotherapy, pharmacotherapy, or case management. The USPSTF recommends that primary care clinicians screen adolescents and adults for depression when appropriate systems are in place to ensure adequate diagnosis, treatment, and follow-up. Primary care clinicians should also focus on patients during periods of high suicide risk, such as immediately after discharge from a psychiatric hospital or after an emergency department visit for deliberate self-harm. Recent evidence suggests that interventions during these high-risk periods are effective in reducing suicide deaths.

### *Potential Harms*

Evidence on the potential harms of screening for suicide risk is insufficient.

### *Costs*

The monetary cost of screening for suicide risk is minimal. Additional time would be needed in the primary care visit to accommodate screening.

### *Current Practice*

In a study of U.S. primary care providers, suicide was discussed in 11% of encounters with patients who had (unknown to their providers) screened positive for suicidal ideation. Similarly, 36% of U.S. primary care physicians explored suicide in encounters with standardized patients presenting with major depression or adjustment disorder or those who sought antidepressants. Less than one quarter of surveyed primary care pediatricians or family practice physicians in Maryland reported that they frequently or always screened adolescents for suicide risk factors.

### *Risk Factors for Suicide*

Although evidence to determine whether the general asymptomatic population should be screened for suicide risk is inadequate, providers should consider identifying patients with risk factors or those who seem to have high levels of emotional distress and referring them for further evaluation.

Suicide risk varies by age, sex, and race or ethnicity. In men, the greatest increases in suicide rate were in those aged 50 to 54 years (49.4% [from 20.6 to 30.7 deaths per 100,000]) and those aged 55 to 59 years (47.8% [from 20.3 to 30.0 deaths per 100,000]). In women, the suicide rate increased with age, and the largest percentage increase was in those aged 60 to 64 years (59.7% [from 4.4 to 7.0 deaths per 100,000]).

American Indians and Alaskan natives aged 14 to 65 years and non-Hispanic white persons older than 18 years have higher-than-average rates of suicide death, and the risk among non-Hispanic white persons continues to increase after age 75 years. The highest rates are seen in American Indians and Alaskan natives aged 19 to 24 years and non-Hispanic white persons older than 75 years. Among adolescents, Hispanic females are at especially high risk for attempting suicide.

The greatest increases in suicide rate from 1999 to 2010 by racial or ethnic population in men and women overall were among American Indians and Alaskan natives (65.2%) and white persons (40.4%). Among American Indians and Alaskan natives, the suicide rate in women increased by 81.4% (from 5.7 to 10.3 deaths per 100,000) and the rate in men increased by 59.5% (from 17.0 to 27.2 deaths per 100,000). Among white persons, the rate in women increased by 41.9% (from 7.4 to 10.5 deaths per 100,000) and the rate in men increased by 39.6% (from 24.5 to 34.2 deaths per 100,000).

Increased risk is also associated with the presence of a mental health disorder, such as depression, schizophrenia, posttraumatic stress disorder, and substance use disorders. About 87% of patients who die by suicide meet the criteria for 1 or more mental health disorders. A lifetime history of depression more than doubles the odds of a suicide attempt in U.S. adults, and depression is probably present in 50% to 79% of youths attempting suicide, although it may not always be recognized.

Other important risk factors for suicide attempt include serious adverse childhood events; family history of suicide; prejudice or discrimination associated with being lesbian, gay, bisexual, or transgender; access to lethal means; and possibly a history of being bullied, sleep disturbances, and such chronic medical conditions as epilepsy and chronic pain. In males, socioeconomic factors, such as low income, occupation, and unemployment are also related to suicide risk.

In older adults, additional risk factors, such as social isolation, spousal bereavement, neurosis, affective disorders, physical illness, and functional impairment, increase the risk for suicide. Risk factors of special importance to military veterans include traumatic brain injury, separation from service within the past 12 months, posttraumatic stress disorder, and other mental health conditions.

Individual risk factors have limited ability to predict suicide in an individual at a particular time. A large proportion of Americans have 1 of these risk factors; however, only a small proportion will attempt suicide, and even fewer will die by it.

## Screening Tests

The reviewed studies used various screening tools. One example is the Suicide Risk Screen, a 20-item screening instrument embedded in a broader self-report questionnaire administered in high schools to youths at risk for dropping out of school. Another tool consists of 3 suicide-related items ("thoughts of death," "wishing you were dead," and "feeling suicidal" within the past month) targeting primary care patients aged 18 to 70 years with scheduled appointments.

Sensitivity and specificity of screening tools generally ranged from 52% to 100% and from 60% to 98%, respectively. The instruments showed a wide range in accuracy, but data were limited and no instruments were examined in more than 1 study.

## Treatment

Most effective treatments to reduce risk for suicide attempt include psychotherapy. The most commonly studied psychotherapy intervention was cognitive behavioral therapy and related approaches, including dialectical behavior therapy, problem-solving therapy, and developmental group therapy. Other approaches included psychodynamic or interpersonal therapy. Although most of these treatments are not customarily administered by primary care providers in the office, patients can be referred to behavioral health providers for them. The primary care provider can play a continued role in the care of these patients by monitoring them during the process, providing follow-up, and coordinating with other care providers.

## Other Approaches to Prevention

In addition to approaching the problem of suicide from an individual level in primary care, approaches are being implemented at community, regional, and national levels. In the health care system, laws requiring coverage parity between mental and physical health disorders will give more persons the ability to access care for psychiatric problems associated with suicide, such as depression. Efforts to coordinate care among programs that address mental health, substance use, and physical health can also increase access to care. Activities that have been shown to be correlated with lower suicide rates in other countries include detoxification of domestic gas in the United Kingdom and discontinuation of the use of highly toxic pesticides in Sri Lanka. These actions were associated with reductions in suicide of 19% to 33% and 50%, respectively, providing evidence that engineering controls can be effective. Such activities as installing barriers at frequent suicide jump spots may also be effective.

On an individual level, patients with a history of suicide attempt or suicidal ideation should not have easy access to means that may be used in suicide attempts, such as firearms or other weapons, household chemicals or poisons, or materials that can be used for hanging or suffocation.

## Useful Resources

The USPSTF recommends that physicians screen adolescents and adults for depression when appropriate systems are in place to ensure adequate diagnosis, treatment, and follow-up (available at [www.uspreventiveservicestaskforce.org](http://www.uspreventiveservicestaskforce.org) ).

The Community Preventive Services Task Force has related recommendations on collaborative care approaches to managing depression, mental health parity policy, and home-based depression care for older adults (available at [www.thecommunityguide.org/mentalhealth/index.html](http://www.thecommunityguide.org/mentalhealth/index.html) ).

In 2012, the U.S. Surgeon General and the National Action Alliance for Suicide Prevention released the National Strategy for Suicide Prevention, which includes goals and objectives for action (available at [www.surgeongeneral.gov/library/reports/national-strategy-suicide-prevention/full-report.pdf](http://www.surgeongeneral.gov/library/reports/national-strategy-suicide-prevention/full-report.pdf) ).

The Suicide Prevention Resource Center, supported by the Substance Abuse and Mental Health Services Administration, offers various resources on suicide prevention (available at [www.sprc.org](http://www.sprc.org) ).

## Definitions:

### What the USPSTF Grades Mean and Suggestions for Practice

Grade	Grade Definitions	Suggestions for Practice
A	The USPSTF recommends the service. There is high certainty that the net benefit is substantial.	Offer/provide this service.
B	The USPSTF recommends the service. There is high certainty	Offer/provide this service.

Grade	Grade Definitions	Suggestions for Practice
C	The USPSTF recommends selectively offering or providing this service to individual patients based on professional judgment and patient preferences. There is at least moderate certainty that the net benefit is small.	Offer/provide this service for selected patients depending on individual circumstances.
D	The USPSTF recommends against the service. There is moderate or high certainty that the service has no net benefit or that the harms outweigh the benefits.	Discourage the use of this service.
I Statement	The USPSTF concludes that the current evidence is insufficient to assess the balance of benefits and harms of the service. Evidence is lacking, of poor quality, or conflicting, and the balance of benefits and harms cannot be measured.	Read the "Clinical Considerations" section of the USPSTF Recommendation Statement (see the "Major Recommendations" field). If the service is offered, patients should understand the uncertainty about the balance of benefits and harms.

### USPSTF Levels of Certainty Regarding Net Benefit

Definition: The USPSTF defines *certainty* as "likelihood that the USPSTF assessment of the net benefit of a preventive service is correct." The net benefit is defined as benefit minus harm of the preventive service as implemented in a general, primary care population. The USPSTF assigns a certainty level based on the nature of the overall evidence available to assess the net benefit of a preventive service.

Level of Certainty	Description
High	The available evidence usually includes consistent results from well-designed, well-conducted studies in representative primary care populations. These studies assess the effects of the preventive service on health outcomes. This conclusion is therefore unlikely to be strongly affected by the results of future studies.
Moderate	<p>The available evidence is sufficient to determine the effects of the preventive service on health outcomes, but confidence in the estimate is constrained by factors such as:</p> <ul style="list-style-type: none"> <li>• The number, size, or quality of individual studies</li> <li>• Inconsistency of findings across individual studies</li> <li>• Limited generalizability of findings to routine primary care practice</li> <li>• Lack of coherence in the chain of evidence</li> </ul> <p>As more information becomes available, the magnitude or direction of the observed effect could change, and this change may be large enough to alter the conclusion.</p>
Low	<p>The available evidence is insufficient to assess effects on health outcomes. Evidence is insufficient because of:</p> <ul style="list-style-type: none"> <li>• The limited number or size of studies</li> <li>• Important flaws in study design or methods</li> <li>• Inconsistency of findings across individual studies</li> <li>• Gaps in the chain of evidence</li> <li>• Findings not generalizable to routine primary care practice</li> <li>• A lack of information on important health outcomes</li> </ul> <p>More information may allow an estimation of effects on health outcomes.</p>

### Clinical Algorithm(s)

None provided

# Scope

## Disease/Condition(s)

Suicide risk

## Guideline Category

Prevention

Screening

## Clinical Specialty

Family Practice

Geriatrics

Internal Medicine

Pediatrics

Preventive Medicine

## Intended Users

Advanced Practice Nurses

Allied Health Personnel

Nurses

Physician Assistants

Physicians

## Guideline Objective(s)

- To update the 2004 USPSTF recommendation on screening for suicide risk
- To review the evidence on the accuracy and reliability of instruments used to screen for increased suicide risk, benefits and harms of screening for increased suicide risk, and benefits and harms of treatments to prevent suicide

## Target Population

Adolescents, adults, and older adults in the general population who do not have an identified psychiatric disorder

## Interventions and Practices Considered

Screening for suicide risk

## Major Outcomes Considered

- Key Question 1: Do screening programs to detect suicide risk among adolescents, adults, and older adults in primary care settings result in improved health outcomes (decreased suicide attempts, decreased suicide deaths, improved functioning, improved quality of life, or improved health status) or intermediate outcomes (decreased suicidal ideation, depressive symptomatology, or hopelessness)? Does the effect of screening programs vary by population characteristics (i.e., sex, age, race/ethnicity, other)\*?
- Key Question 2: Do instruments to screen for increased risk for suicide accurately identify adolescents, adults, and older adults who are at increased risk in primary care populations? Does the accuracy of the screening instruments vary by population characteristics\*?
- Key Question 3: Are there harms associated with screening for suicide risk in primary care settings? Do the harms vary by population characteristics\*?
- Key Question 4: For those identified as being at increased risk for suicide, do interventions to reduce suicide risk (behaviorally based, including home visits or counseling for environmental change, or pharmacologic) result in improved health outcomes (decreased suicide attempts, decreased suicide deaths, improved functioning, improved quality of life, or improved health status)? Does the effect of the interventions vary by population characteristics\*?
- Key Question 5: For those identified as being at increased risk for suicide, do interventions to reduce suicide risk (behaviorally based, including home visits or counseling for environmental change, or pharmacologic) result in improved intermediate outcomes (suicidal ideation, decreased access to means of suicide, increased treatment of previously undiagnosed mental health conditions, decreases in depressive symptomatology or hopelessness)? Does the effect of screening programs vary by population characteristics\*?
- Key Question 6: For those identified as being at increased risk for suicide, what are the harms of behaviorally based or pharmacologic treatment to reduce suicide risk? Do the harms vary by population characteristics\*?

\*Population characteristics include sex; age; race/ethnicity; comorbid medical illness; history of suicide attempts; and social, mental health, or other psychological factors.

## Methodology

### Methods Used to Collect/Select the Evidence

Hand-searches of Published Literature (Primary Sources)

Hand-searches of Published Literature (Secondary Sources)

Searches of Electronic Databases

### Description of Methods Used to Collect/Select the Evidence

Note from the National Guideline Clearinghouse (NGC): A systematic evidence review was prepared by the Kaiser Permanente Research Affiliates Evidence-based Practice Center (EPC) for the U.S. Preventive Services Task Force (USPSTF) (see the "Availability of Companion Documents" field).

#### Data Sources

EPC staff considered all studies from the previous review for inclusion. They searched MEDLINE, PsycINFO, CINAHL, and the Cochrane Central Register of Controlled Trials for studies published between January 2002 and 17 July 2012 to bridge and update from the previous review. EPC staff hand-searched bibliographies of relevant reviews and searched Web sites of government agencies and professional organizations to identify relevant research published outside of peer-reviewed journals. They also conducted a surveillance search of MEDLINE through December 2012 to identify additional screening trials.

#### Study Selection

Two investigators independently reviewed the abstracts and articles against specified inclusion and exclusion criteria. They resolved disagreements through consultation with the larger project team. They included English language studies in general primary care or specialty mental health populations (or similar populations) of any age. EPC staff also included studies limited to patients with depression, substance misuse, posttraumatic stress disorder, or borderline personality disorder. They excluded studies limited to patients with other mental health conditions.

For questions related to harms and benefits of screening or treatment, EPC staff included randomized and nonrandomized clinical trials. To address effects of treatment, they included trials of behavior-based or pharmacologic treatment with a primary aim of reducing suicide deaths, suicide

attempts or self-harm, or suicidal ideation. They included studies of screening instrument accuracy that reported sensitivity, specificity, or related statistics of brief screening instruments to detect current increased suicide risk (usually suicidal ideation) relative to a reference standard. The reference standard had to be a more in-depth assessment of suicide risk by a trained mental health professional or a trained interviewer using a standardized instrument to determine whether suicide risk was increased. EPC staff would have included suicide attempts in the immediate period after screening (for example, 1 month) as a gold standard if they had found any studies that did this. EPC staff also would have included comparative cohort studies addressing harms of pharmacologic treatment in suicidal populations if they had found any.

## Number of Source Documents

- Key Question 1: 1 article (1 study)
- Key Question 2: 4 articles (4 studies)
- Key Question 3: 5 articles (3 studies)
- Key Question 4: 71 articles (43 studies)
- Key Question 5: 64 articles (36 studies)
- Key Question 6: 14 articles (12 studies)

## Methods Used to Assess the Quality and Strength of the Evidence

Expert Consensus

Weighting According to a Rating Scheme (Scheme Given)

## Rating Scheme for the Strength of the Evidence

The Evidence-based Practice Center (EPC) staff supplemented design-specific quality criteria based on methods developed by the U.S. Preventive Services Task Force (USPSTF) with the Quality Assessment of Diagnostic Accuracy Studies (QUADAS) tool to evaluate the quality of diagnostic accuracy (screening) studies, resulting in a rating of good, fair, or poor. See the evidence review (see the "Availability of Companion Documents" field) for more detail.

## Methods Used to Analyze the Evidence

Meta-Analysis

Review of Published Meta-Analyses

Systematic Review with Evidence Tables

## Description of the Methods Used to Analyze the Evidence

Note from the National Guideline Clearinghouse (NGC): A systematic evidence review was prepared by the Kaiser Permanente Research Affiliates Evidence-based Practice Center (EPC) for the U.S. Preventive Services Task Force (USPSTF) (see the "Availability of Companion Documents" field).

Data Extraction and Quality Assessment

One investigator abstracted data from all included studies into a standard evidence table, and a second investigator checked the data for accuracy. Two investigators independently assessed the methodological quality of each study by using predefined design-specific quality criteria based on methods developed by the USPSTF. They supplemented these criteria with the Quality Assessment of Diagnostic Accuracy Studies tool to evaluate the quality of diagnostic accuracy (screening) studies, resulting in a rating of good, fair, or poor. EPC staff resolved disagreements in quality assessment through discussion and, if necessary, consultation with a third reviewer. They excluded poor quality trials.

Data Synthesis and Analysis

For all key questions, EPC staff created results tables with important study characteristics. They critically examined these tables to identify the

range of results and potential associations with effect size. They examined trials limited to adolescents or limited to older adults separately from other adult trials.

For key questions 4 and 5 only, EPC staff conducted random-effects meta-analyses to estimate the effect size of suicide prevention interventions on suicide attempts or self-harm, suicidal ideation, and depression. EPC staff used Stata, version 11.2 (StataCorp, College Station, Texas), for all statistical analyses. Risk ratios were analyzed for suicide attempts. All trials reported at least 1 suicide attempt or self-harm episode in each intervention group, so no correction for empty cells was needed. They analyzed standardized mean differences (SMDs) in change from baseline for the continuous outcomes (suicidal ideation and depression). They calculated standard deviations (SDs) of change from baseline by using a standard formula.

EPC staff assessed the presence of statistical heterogeneity among the studies by using standard chi-square tests and the  $I^2$  statistic. They applied the Cochrane Collaboration rules of thumb for interpreting  $I^2$  (probably unimportant, >40%; moderate, 30% to 60%; and substantial, 50% to 90%) and Cohen rules of thumb for interpreting effect sizes (small, 0.2 to 0.5; medium, 0.5 to 0.8; and large,  $\geq 0.8$ ).

## Methods Used to Formulate the Recommendations

- Balance Sheets
- Expert Consensus

## Description of Methods Used to Formulate the Recommendations

The U.S. Preventive Services Task Force (USPSTF) systematically reviews the evidence concerning both the benefits and harms of widespread implementation of a preventive service. It then assesses the certainty of the evidence and the magnitude of the benefits and harms. On the basis of this assessment, the USPSTF assigns a letter grade to each preventive service signifying its recommendation about provision of the service (see table below). An important, but often challenging, step is determining the balance between benefits and harms to estimate "net benefit" (that is, benefits minus harms).

Table 1. U.S. Preventive Services Task Force Recommendation Grid\*

Certainty of Net Benefit	Magnitude of Net Benefit			
	Substantial	Moderate	Small	Zero/Negative
High	A	B	C	D
Moderate	B	B	C	D
Low	Insufficient			

\*A, B, C, D, and I (*Insufficient*) represent the letter grades of recommendation or statement of insufficient evidence assigned by the USPSTF after assessing certainty and magnitude of net benefit of the service (see the "Rating Scheme for the Strength of the Recommendations" field).

The overarching question that the USPSTF seeks to answer for every preventive service is whether evidence suggests that provision of the service would improve health outcomes if implemented in a general primary care population. For screening topics, this standard could be met by a large randomized, controlled trial (RCT) in a representative asymptomatic population with follow-up of all members of both the group "invited for screening" and the group "not invited for screening."

Direct RCT evidence about screening is often unavailable, so the USPSTF considers indirect evidence. To guide its selection of indirect evidence, the Task Force constructs a "chain of evidence" within an analytic framework. For each key question, the body of pertinent literature is critically appraised, focusing on the following 6 questions:

1. Do the studies have the appropriate research design to answer the key question(s)?
2. To what extent are the existing studies of high quality? (i.e., what is the internal validity?)
3. To what extent are the results of the studies generalizable to the general U.S. primary care population and situation? (i.e., what is the external validity?)



4. How many studies have been conducted that address the key question(s)? How large are the studies? (i.e., what is the precision of the evidence?)
5. How consistent are the results of the studies?
6. Are there additional factors that assist the USPSTF in drawing conclusions (e.g., presence or absence of dose–response effects, fit within a biologic model)?

The next step in the USPSTF process is to use the evidence from the key questions to assess whether there would be net benefit if the service were implemented. In 2001, the USPSTF published an article that documented its systematic processes of evidence evaluation and recommendation development. At that time, the USPSTF's overall assessment of evidence was described as good, fair, or poor. The USPSTF realized that this rating seemed to apply only to how well studies were conducted and did not fully capture all of the issues that go into an overall assessment of the evidence about net benefit. To avoid confusion, the USPSTF has changed its terminology. Whereas individual study quality will continue to be characterized as good, fair, or poor, the term certainty will now be used to describe the USPSTF's assessment of the overall body of evidence about net benefit of a preventive service and the likelihood that the assessment is correct. Certainty will be determined by considering all 6 questions listed above; the judgment about certainty will be described as high, moderate, or low.

In making its assessment of certainty about net benefit, the evaluation of the evidence from each key question plays a primary role. It is important to note that the USPSTF makes recommendations for real-world medical practice in the United States and must determine to what extent the evidence for each key question—even evidence from screening RCTs or treatment RCTs—can be applied to the general primary care population. Frequently, studies are conducted in highly selected populations under special conditions. The USPSTF must consider differences between the general primary care population and the populations studied in RCTs and make judgments about the likelihood of observing the same effect in actual practice.

It is also important to note that one of the key questions in the analytic framework refers to the potential harms of the preventive service. The USPSTF considers the evidence about the benefits and harms of preventive services separately and equally. Data about harms are often obtained from observational studies because harms observed in RCTs may not be representative of those found in usual practice and because some harms are not completely measured and reported in RCTs.

Putting the body of evidence for all key questions together as a chain, the USPSTF assesses the certainty of net benefit of a preventive service by asking the 6 major questions listed above. The USPSTF would rate a body of convincing evidence about the benefits of a service that, for example, derives from several RCTs of screening in which the estimate of benefits can be generalized to the general primary care population as "high" certainty (see the "Rating Scheme for the Strength of Recommendations" field). The USPSTF would rate a body of evidence that was not clearly applicable to general practice or has other defects in quality, research design, or consistency of studies as "moderate" certainty. Certainty is "low" when, for example, there are gaps in the evidence linking parts of the analytic framework, when evidence to determine the harms of treatment is unavailable, or when evidence about the benefits of treatment is insufficient. Table 4 in the methodology document listed below (see the "Availability of Companion Documents" field) summarizes the current terminology used by the USPSTF to describe the critical assessment of evidence at all 3 levels: individual studies, key questions, and overall certainty of net benefit of the preventive service.

Sawaya GF et al. Update on the methods of the U.S. Preventive Services Task Force: estimating certainty and magnitude of net benefit. *Ann Intern Med.* 2007;147:871-875. [5 references].

## I Statements

For I statements, the USPSTF has a new plan to commission its Evidence-based Practice Centers to collect information in 4 domains pertinent to clinical decisions about prevention and to report this information routinely. This plan is described in the paper: Petitti DB et al. Update on the methods of the U.S. Preventive Services Task Force: insufficient evidence. *Ann Intern Med.* 2009;150:199-205. [www.annals.org](http://www.annals.org)

The first domain is potential preventable burden of suffering from the condition. When evidence is insufficient, provision of an intervention designed to prevent a serious condition (such as dementia) might be viewed more favorably than provision of a service designed to prevent a condition that does not cause as much suffering (such as rash). The USPSTF recognized that "burden of suffering" is subjective and involves judgment. In clinical settings, it should be informed by patient values and concerns.

The second domain is potential harm of the intervention. When evidence is insufficient, an intervention with a large potential for harm (such as major surgery) might be viewed less favorably than an intervention with a small potential for harm (such as advice to watch less television). The USPSTF again acknowledges the subjective nature and the difficulty of assessing potential harms: for example, how bad is a "mild" stroke?

The third domain is cost—not just monetary cost, but opportunity cost, in particular the amount of time a provider spends to provide the service, the amount of time the patient spends to partake of it, and the benefits that might derive from alternative uses of the time or money for patients,

clinicians, or systems. Consideration of clinician time is especially important for preventive services with only insufficient evidence because providing them could "crowd out" provision of preventive services with proven value, services for conditions that require immediate action, or services more desired by the patient. For example, a decision to routinely inspect the skin could take up the time available to discuss smoking cessation, or to address an acute problem or a minor injury that the patient considers important.

The fourth domain is current practice. This domain was chosen because it is important to clinicians for at least 2 reasons. Clinicians justifiably fear that not doing something that is done on a widespread basis in the community may lead to litigation. More important, addressing patient expectations is a crucial part of the clinician–patient relationship in terms of building trust and developing a collaborative therapeutic relationship. The consequences of not providing a service that is neither widely available nor widely used are less serious than not providing a service accepted by the medical profession and thus expected by patients. Furthermore, ingrained care practices are difficult to change, and efforts should preferentially be directed to changing those practices for which the evidence to support change is compelling.

Although the reviewers did not explicitly recognize it when these domains were chosen, the domains all involve consideration of the potential consequences—for patients, clinicians, and systems—of providing or not providing a service. Others writing about medical decision making in the face of uncertainty have suggested that the consequences of action or inaction should play a prominent role in decisions.

## Rating Scheme for the Strength of the Recommendations

What the U.S. Preventive Services Task Force (USPSTF) Grades Mean and Suggestions for Practice

Grade	Grade Definitions	Suggestions for Practice
A	The USPSTF recommends the service. There is high certainty that the net benefit is substantial.	Offer/provide this service.
B	The USPSTF recommends the service. There is high certainty that the net benefit is moderate or there is moderate certainty that the net benefit is moderate to substantial.	Offer/provide this service.
C	The USPSTF recommends selectively offering or providing this service to individual patients based on professional judgment and patient preferences. There is at least moderate certainty that the net benefit is small.	Offer/provide this service for selected patients depending on individual circumstances.
D	The USPSTF recommends against the service. There is moderate or high certainty that the service has no net benefit or that the harms outweigh the benefits.	Discourage the use of this service.
I Statement	The USPSTF concludes that the current evidence is insufficient to assess the balance of benefits and harms of the service. Evidence is lacking, of poor quality, or conflicting, and the balance of benefits and harms cannot be measured.	Read the "Clinical Considerations" section of the USPSTF Recommendation Statement (see the "Major Recommendations" field). If the service is offered, patients should understand the uncertainty about the balance of benefits and harms.

### USPSTF Levels of Certainty Regarding Net Benefit

Definition: The USPSTF defines *certainty* as "likelihood that the USPSTF assessment of the net benefit of a preventive service is correct." The net benefit is defined as benefit minus harm of the preventive service as implemented in a general, primary care population. The USPSTF assigns a certainty level based on the nature of the overall evidence available to assess the net benefit of a preventive service.

Level of Certainty	Description
High	The available evidence usually includes consistent results from well-designed, well-conducted studies in representative primary care populations. These studies assess the effects of the preventive service on health outcomes. This conclusion is therefore unlikely to be strongly affected by the results of future studies.

Moderate Level of Certainty	Description
	<p>The available evidence is sufficient to determine the effects of the preventive service on health outcomes, but confidence in the estimate is constrained by factors such as:</p> <ul style="list-style-type: none"> <li>• The number, size, or quality of individual studies</li> <li>• Inconsistency of findings across individual studies</li> <li>• Limited generalizability of findings to routine primary care practice</li> <li>• Lack of coherence in the chain of evidence</li> </ul> <p>As more information becomes available, the magnitude or direction of the observed effect could change, and this change may be large enough to alter the conclusion.</p>
Low	<p>The available evidence is insufficient to assess effects on health outcomes. Evidence is insufficient because of:</p> <ul style="list-style-type: none"> <li>• The limited number or size of studies</li> <li>• Important flaws in study design or methods</li> <li>• Inconsistency of findings across individual studies</li> <li>• Gaps in the chain of evidence</li> <li>• Findings not generalizable to routine primary care practice</li> <li>• A lack of information on important health outcomes</li> </ul> <p>More information may allow an estimation of effects on health outcomes.</p>

## Cost Analysis

A cost analysis was not performed and published cost analyses were not reviewed.

## Method of Guideline Validation

Comparison with Guidelines from Other Groups

External Peer Review

Internal Peer Review

## Description of Method of Guideline Validation

Peer Review. Before the U.S. Preventive Services Task Force (USPSTF) makes its final determinations about recommendations on a given preventive service, the Evidence-based Practice Center and the Agency for Healthcare Research and Quality send a draft evidence review to 4 to 6 external experts and to Federal agencies and professional and disease-based health organizations with interests in the topic. The experts are asked to examine the review critically for accuracy and completeness and to respond to a series of specific questions about the document. After assembling these external review comments and documenting the proposed response to key comments, the topic team presents this information to the USPSTF in memo form. In this way, the USPSTF can consider these external comments before it votes on its recommendations about the service. Draft recommendation statements are then circulated for comment among reviewers representing professional societies, voluntary organizations, and Federal agencies, as well as posted on the USPSTF Web site for public comment. These comments are discussed before the final recommendations are confirmed.

Response to Public Comment: A draft version of this recommendation statement was posted for public comment on the USPSTF Web site from 23 April to 21 May 2013. Most comments generally agreed with the recommendation statement. However, many requested clarification about whether it applies only to primary care settings. Several comments expressed concern that primary care providers would interpret the I statement as a statement against screening for suicide risk. In response to these comments, the USPSTF clarified that the recommendation applies to screening in a primary care setting, updated statistics on suicide, included additional information on risk factors, expanded the Research Needs and Gaps section, and updated the Recommendations of Others section.

Comparison with Guidelines from Other Groups. Recommendations for screening from the following groups were discussed: the American Academy of Child and Adolescent Psychiatry, the American Academy of Pediatrics, the American Medical Association, the American College of Obstetricians and Gynecologists, the American Academy of Family Physicians, and the Canadian Task Force on Preventive Health Care.

# Evidence Supporting the Recommendations

## Type of Evidence Supporting the Recommendations

The type of evidence supporting the recommendations is not specifically stated.

## Benefits/Harms of Implementing the Guideline Recommendations

### Potential Benefits

Benefits of Detection and Early Intervention or Treatment

Evidence on the benefits of screening adolescents, adults, and older adults for suicide risk in primary care is inadequate.

Evidence is inadequate on whether interventions reduce suicide risk in patients identified through primary care screening or similar methods; most evidence for treatment effectiveness is in high-risk populations who were not discovered through screening, such as persons who presented to an emergency department because of a suicide attempt.

### Potential Harms

Harms of Detection and Early Intervention or Treatment

Evidence on the possible harms of screening adolescents, adults, and older adults for suicide risk is inadequate.

## Qualifying Statements

### Qualifying Statements

- The U.S. Preventive Services Task Force (USPSTF) makes recommendations about the effectiveness of specific clinical preventive services for patients without related signs or symptoms.
- It bases its recommendations on the evidence of both the benefits and harms of the service and an assessment of the balance. The USPSTF does not consider the costs of providing a service in this assessment.
- The USPSTF recognizes that clinical decisions involve more considerations than evidence alone. Clinicians should understand the evidence but individualize decision making to the specific patient or situation. Similarly, the USPSTF notes that policy and coverage decisions involve considerations in addition to the evidence of clinical benefits and harms.
- Recommendations made by the USPSTF are independent of the U.S. government. They should not be construed as an official position of the Agency for Healthcare Research and Quality or the U.S. Department of Health and Human Services.

## Implementation of the Guideline

### Description of Implementation Strategy

The experiences of the first and second U.S. Preventive Services Task Force (USPSTF), as well as that of other evidence-based guideline efforts, have highlighted the importance of identifying effective ways to implement clinical recommendations. Practice guidelines are relatively weak tools for changing clinical practice when used in isolation. To effect change, guidelines must be coupled with strategies to improve their acceptance and feasibility. Such strategies include enlisting the support of local opinion leaders, using reminder systems for clinicians and patients, adopting standing orders, and audit and feedback of information to clinicians about their compliance with recommended practice.

In the case of preventive services guidelines, implementation needs to go beyond traditional dissemination and promotion efforts to recognize the added patient and clinician barriers that affect preventive care. These include clinicians' ambivalence about whether preventive medicine is part of their job, the psychological and practical challenges that patients face in changing behaviors, lack of access to health care or of insurance coverage for preventive services for some patients, competing pressures within the context of shorter office visits, and the lack of organized systems in most practices to ensure the delivery of recommended preventive care.

Dissemination strategies have changed dramatically in this age of electronic information. While recognizing the continuing value of journals and other print formats for dissemination, the USPSTF will make all its products available through its [Web site](#) . The combination of electronic access and extensive material in the public domain should make it easier for a broad audience of users to access USPSTF materials and adapt them for their local needs. Online access to USPSTF products also opens up new possibilities for the appearance of the annual, pocket-size *Guide to Clinical Preventive Services*.

To be successful, approaches for implementing prevention have to be tailored to the local level and deal with the specific barriers at a given site, typically requiring the redesign of systems of care. Such a systems approach to prevention has had notable success in established staff-model health maintenance organizations, by addressing organization of care, emphasizing a philosophy of prevention, and altering the training and incentives for clinicians. Staff-model plans also benefit from integrated information systems that can track the use of needed services and generate automatic reminders aimed at patients and clinicians, some of the most consistently successful interventions. Information systems remain a major challenge for individual clinicians' offices, however, as well as for looser affiliations of practices in network-model managed care and independent practice associations, where data on patient visits, referrals, and test results are not always centralized.

## Implementation Tools

Foreign Language Translations

Mobile Device Resources

Patient Resources

Pocket Guide/Reference Cards

Staff Training/Competency Material

For information about availability, see the *Availability of Companion Documents* and *Patient Resources* fields below.

## Institute of Medicine (IOM) National Healthcare Quality Report Categories

### IOM Care Need

Staying Healthy

### IOM Domain

Effectiveness

Patient-centeredness

## Identifying Information and Availability

### Bibliographic Source(s)

## Adaptation

Not applicable: The guideline was not adapted from another source.

## Date Released

1996 (revised 2014 May 20)

## Guideline Developer(s)

U.S. Preventive Services Task Force - Independent Expert Panel

## Guideline Developer Comment

The U.S. Preventive Services Task Force (USPSTF) is a federally-appointed panel of independent experts. Conclusions of the USPSTF do not necessarily reflect policy of the U.S. Department of Health and Human Services (DHHS) or its agencies.

## Source(s) of Funding

The USPSTF is an independent, voluntary body. The U.S. Congress mandates that the Agency for Healthcare Research and Quality support the operations of the USPSTF.

## Guideline Committee

U.S. Preventive Services Task Force (USPSTF)

## Composition of Group That Authored the Guideline

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David Grossman, MD, MPH, a former USPSTF member, also contributed to the development of the recommendation.

*\*Members of the USPSTF at the time this recommendation was finalized. For a list of current Task Force members, go to <http://www.uspreventiveservicestaskforce.org/Page/Name/our-members> .*



## Financial Disclosures/Conflicts of Interest

The U.S. Preventive Services Task Force (USPSTF) has an explicit policy concerning conflict of interest. All members disclose at each meeting if they have a significant financial, professional/business, or intellectual conflict for each topic being discussed. USPSTF members with conflicts may be recused from discussing or voting on recommendations about the topic in question.

*Disclosures:* Dr. Owens reports receiving support from the U.S. Preventive Services Task Force for travel to meetings. Authors not named here have disclosed no conflicts of interest. Authors followed the policy regarding conflicts of interest described at [www.uspreventiveservices.taskforce.org/methods.htm](http://www.uspreventiveservices.taskforce.org/methods.htm) . Forms can be viewed at [www.acponline.org/authors/icnje/ConflictOfInterestForms.do?msNum=M14-0589](http://www.acponline.org/authors/icnje/ConflictOfInterestForms.do?msNum=M14-0589) .

## Guideline Status

This is the current release of the guideline.

This guideline updates a previous version: U.S. Preventive Services Task Force. Screening for suicide risk: recommendation and rationale. *Ann Intern Med* 2004;140:820-1. [4 references].

## Guideline Availability

Electronic copies: Available from the [Annals of Internal Medicine Web site](#) .

## Availability of Companion Documents

The following are available:

Evidence Reviews:

- O'Connor E, Gaynes BN, Burda BU, Soh C, Whitlock EP. Screening for and treatment of suicide risk relevant to primary care: a systematic review for the U.S. Preventive Services Task Force. *Ann Intern Med*. 2013;158:741-754.
- O'Connor E, Gaynes BN, Burda BU, Williams C, Whitlock EP. Screening for suicide risk in primary care: a systematic evidence review for the U.S. Preventive Services Task Force. Evidence Synthesis No. 103. AHRQ Publication No. 13-05188-EF-1. Rockville (MD): Agency for Healthcare Research and Quality (AHRQ); 2014 Apr. 176 p.

Electronic copies: Available from the [U.S. Preventive Services Task Force \(USPSTF\) Web site](#) .

Background Articles:

- Barton MB et al. How to read the new recommendation statement: methods update from the U.S. Preventive Services Task Force. *Ann Intern Med* 2007;147:123-127.
- Guirguis-Blake J et al. Current processes of the U.S. Preventive Services Task Force: refining evidence-based recommendation development. *Ann Intern Med* 2007;147:117-122.
- Sawaya GF et al. Update on the methods of the U.S. Preventive Services Task Force: estimating certainty and magnitude of net benefit. *Ann Intern Med* 2007;147:871-875.
- Petitti DB et al. Update on the methods of the U.S. Preventive Services Task Force: insufficient evidence. *Ann Intern Med*. 2009;150:199-205.

Electronic copies: Available from [USPSTF Web site](#) .

The following are also available:

- The guide to clinical preventive services, 2014. Recommendations of the U.S. Preventive Services Task Force. Rockville (MD): Agency for Healthcare Research and Quality (AHRQ); 2014. 144 p. Electronic copies: Available from the [Agency for Healthcare Research and Quality \(AHRQ\) Web site](#) . See the related QualityTool summary on the [Health Care Innovations Exchange Web site](#) .
- Screening for suicide risk in adolescents, adults, and older adults in primary care. Clinical summary of U.S. Preventive Services Task Force

Recommendation. 2014. 1 p. Electronic copies: Available from the [USPSTF Web site](#) .

- A continuing medical education (CME) activity is available from the [Annals of Internal Medicine Web site](#) .

The [Electronic Preventive Services Selector \(ePSS\)](#)  is an application designed to provide primary care clinicians and health care teams timely decision support regarding appropriate screening, counseling, and preventive services for their patients. It is based on the current, evidence-based recommendations of the USPSTF and can be searched by specific patient characteristics, such as age, sex, and selected behavioral risk factors.

## Patient Resources

The following are available:

- Screening for suicide risk in adolescents, adults, and older adults in primary care. Understanding task force recommendations. Consumer fact sheet. Rockville (MD): U.S. Preventive Services Task Force. 2014 May. 3 p. Electronic copies: Available from the [U.S. Preventive Services Task Force \(USPSTF\) Web site](#) .
- Screening for suicide risk in adolescents, adults, and older adults in primary care: recommendations from the U.S. Preventive Services Task Force. Summaries for patients. *Ann Intern Med.* 2014;160(10):I-22. Electronic copies: Available from the [Annals of Internal Medicine Web site](#) .
- Women: stay healthy at any age. 2014 update. AHRQ Pub. No. 14-IP007-A. Rockville (MD): Agency for Healthcare Research and Quality. 2014 Mar. 5 p. Electronic copies: Available in [English](#)  and [Spanish](#)  from the AHRQ Web site. See the related QualityTool summary on the [Health Care Innovations Exchange Web site](#) .
- Men: stay healthy at any age. 2014 update. AHRQ Pub. No. 14-IP006-A. Rockville (MD): Agency for Healthcare Research and Quality. 2014 Mar. 5 p. Electronic copies: Available in [English](#)  and [Spanish](#)  from the AHRQ Web site. See the related QualityTool summary on the [Health Care Innovations Exchange Web site](#) .

Print copies: Available in English and Spanish from the Agency for Healthcare Research and Quality (AHRQ) Publications Clearinghouse. For more information, go to <http://www.ahrq.gov/research/publications/index.html>  or call 1-800-358-9295 (U.S. only).

Myhealthfinder is a tool that provides personalized recommendations for clinical preventive services specific to the user's age, gender, and pregnancy status. It features evidence-based recommendations from the USPSTF and is available at [www.healthfinder.gov](http://www.healthfinder.gov) .

Please note: This patient information is intended to provide health professionals with information to share with their patients to help them better understand their health and their diagnosed disorders. By providing access to this patient information, it is not the intention of NGC to provide specific medical advice for particular patients. Rather we urge patients and their representatives to review this material and then to consult with a licensed health professional for evaluation of treatment options suitable for them as well as for diagnosis and answers to their personal medical questions. This patient information has been derived and prepared from a guideline for health care professionals included on NGC by the authors or publishers of that original guideline. The patient information is not reviewed by NGC to establish whether or not it accurately reflects the original guideline's content.

## NGC Status

This summary was completed by ECRI on June 30, 1998. The information was verified by the guideline developer on December 1, 1998. This summary was updated by ECRI on May 18, 2004. The updated information was verified by the guideline developer on May 20, 2004. This summary was updated by ECRI Institute on July 22, 2014. The updated information was verified by the guideline developer on August 13, 2014.

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